

ABSTRACT OF THE DISCLOSURE

A dental handpiece including a housing of a size and configuration to be conveniently graspable by a user; a dental tool clamping device carried by the housing; a dental tool to be clamped in the clamping device; a rotary drive for rotating the clamping device, and the dental tool when clamped therein; and a transmission system coupling the rotary drive to the dental tool to rotate same. The dental tool includes a driving tip for engaging the head of a fastening member to be fixed by rotation within the patient's mouth. The transmission system includes a torque limiter for limiting the torque applied by the rotary drive to the driving tip. In some described embodiments, the torque limiter is included within the dental housing, and in other described embodiments it is included within the dental tool.